

**From:** Chuck Hornaday <chornaday@terratherm.com>  
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**To:** HarborComments  
**Subject:** Comments regarding the Portland Harbor Superfund Site Proposed Plan – June 2016  
**Attachments:** removed.txt; HB1100 Collateral.pdf

Comments regarding the Portland Harbor Superfund Site Proposed Plan – June 2016

COCs posing greatest risk include; PCBs, PAHs, Dioxins, furans and DDT. All of these organic compounds are able to be treated thermally.

P 28. In-Situ Treatment. It is unclear from the discussion provided in the proposed plan whether In-Situ thermal treatment has been considered for river bank and shallow regions of the river. In-situ thermal treatment has proven to be effective on the organic contaminants that are present at this site. Thermal treatment adjacent to water bodies has been completed in the past through either dewatering or creating temporary working area by placing clean fill above the contaminated sediments to bring the area above the water level. Remedial options should be opened to including this as a possible alternative.

P 30. Ex-Situ Treatment. Low temperature thermal desorption has been demonstrated at other sediment sites to treat PCBs, dioxins/furans and other persistent organic contaminants. This technology should be considered as applicable for this site. Sediments may be treated ex-situ either in specially constructed containment piles or cells. Additionally, modular treatment boxes capable of treating to temperatures sufficient to treat the organic contaminants of concern are now commercially available. Treated sediments may potentially be beneficially reused as a part of this project, this would reduce the overall risk associated with continued liability of wastes disposed of at a subtitle C or D landfill. The modular treatment boxes include re-usable, plug and play equipment which simplifies construction labor and reduces engineering overhead. Each unit is approximately the size of a standard shipping container and is capable of treating 100 cubic yards of contaminated soil in each treatment batch, which depending on contamination type/concentration as well as soil moisture content, can take anywhere from 15 to 30 days. More units can be brought onto the site in order accommodate larger projects or to reduce overall project duration if this is an important factor being considered.

A basic technology overview with case study results from a pilot-test is attached. Additionally, an educational webinar was recently presented on the technology, and a recording of which is now available to view: [http://terratherm.com/resources/HB1100\\_Webinar.htm](http://terratherm.com/resources/HB1100_Webinar.htm)

P 31. Disposed Material Management Scenarios. DMM1 includes the use of an onsite CDF. Depending on location of the DCF and how it is constructed, in-situ thermal remediation (ISTR) could be considered as a method to further reduce risks associated with the contained waste. ISTR could potentially be implemented in the CDF after it is filled.



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